



Hexy: Body Building

Written By: Chris Connors



TOOLS:

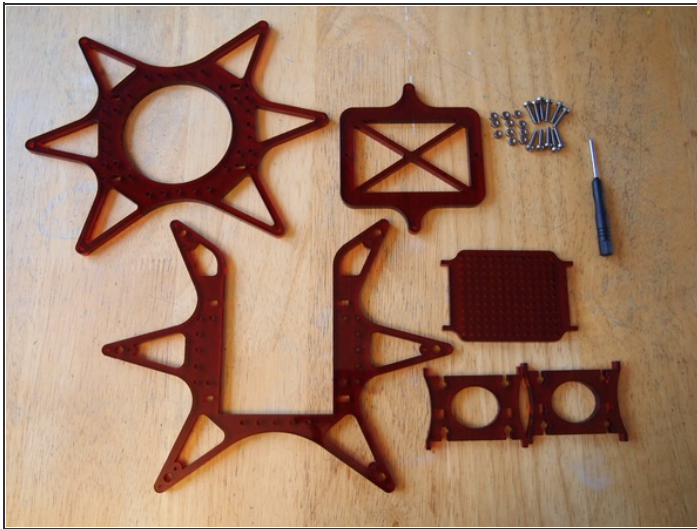
- [Phillips 2 Screwdriver \(1\)](#)



PARTS:

- [Hexy Leg Assembly, Hexy Body parts \(1\)](#)
- [1x Hexy Body Parts \(1\)](#)

Step 1 — Hexy: Body Building



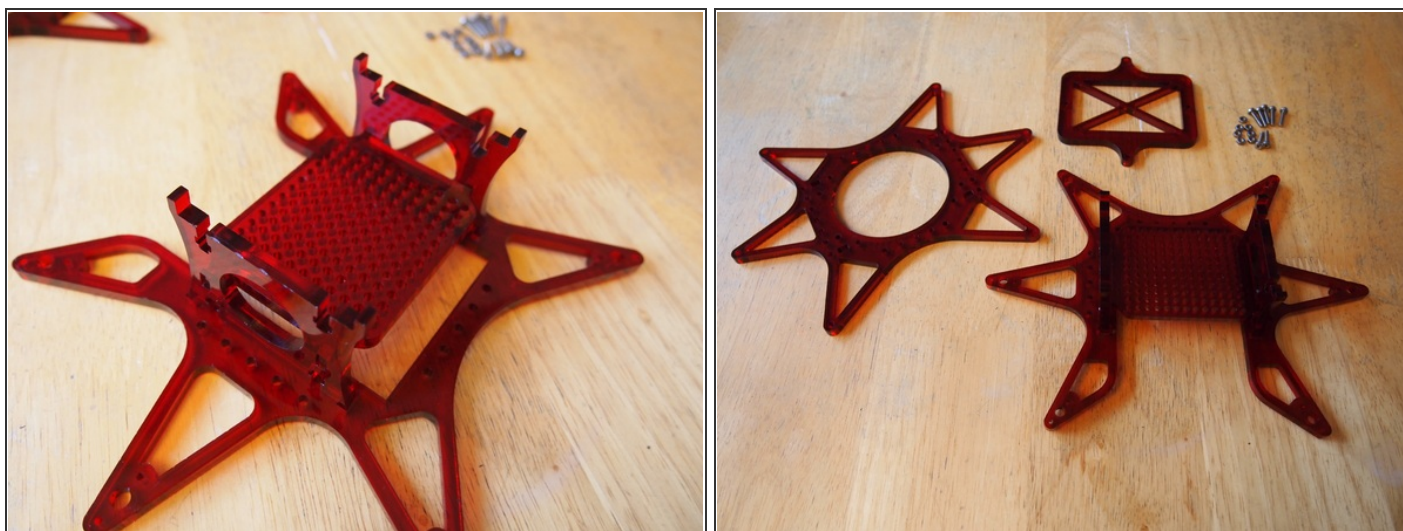
- Gather your body parts and six legs.
- Peel the paper from the body parts.
- Arrange the parts so you can tell you have: Top, Bottom, Shelf, two Uprights, Battery Shelf.
- You will also need machine screws and nuts.
- The only tool you will need is the #2 Phillips screwdriver that ships with the Hexy kit.
- To attach the servo horns to the body, you will need twelve #2 self-tapping screws.

Step 2



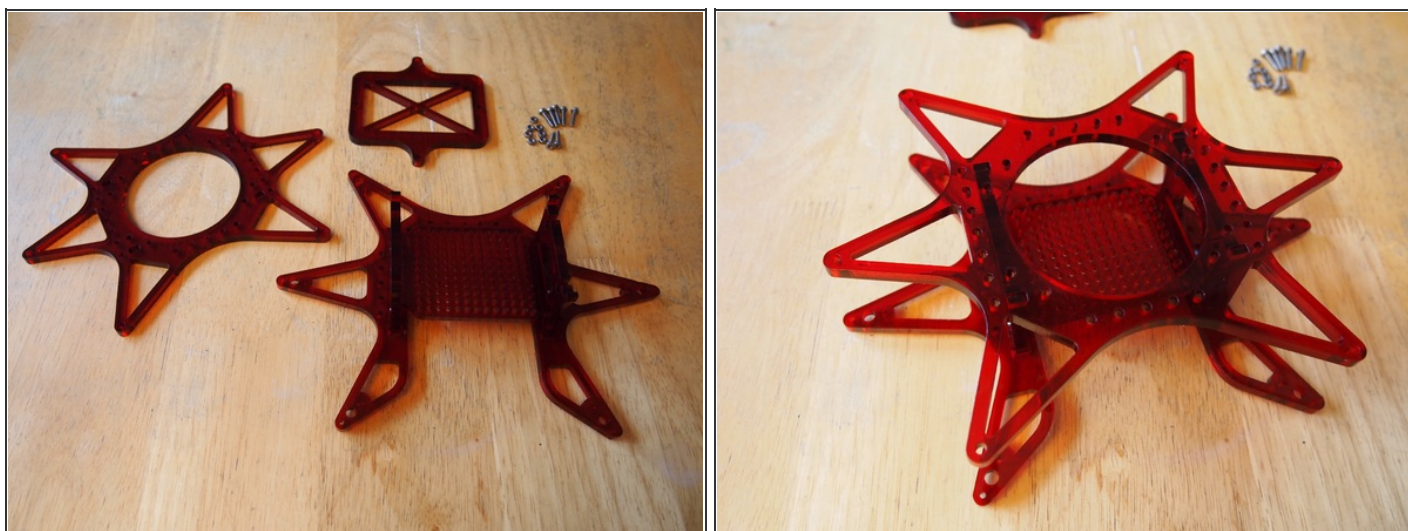
- Pick up the Bottom panel. This is the one with the center rectangle that has an opening on one side.
- Inspect the uprights. There are two vertical rectangles in the center of the shape. These rectangles will hold the shelf. The rectangle shapes are towards the bottom of the shape.
- Place the upright into two of the slots to the side of the opening in the rectangle. Put a machine nut in one of the captive nut slots on the upright. Place the machine screw in the corresponding hole in the bottom panel and finger-tighten the screw.
- Put a machine nut in the other hole on the upright, add a screw and tighten it.

Step 3



- Add the second upright, and place the shelf between the two uprights.
- Place the machine nuts and screws.
- Tighten the screws with the screwdriver.

Step 4



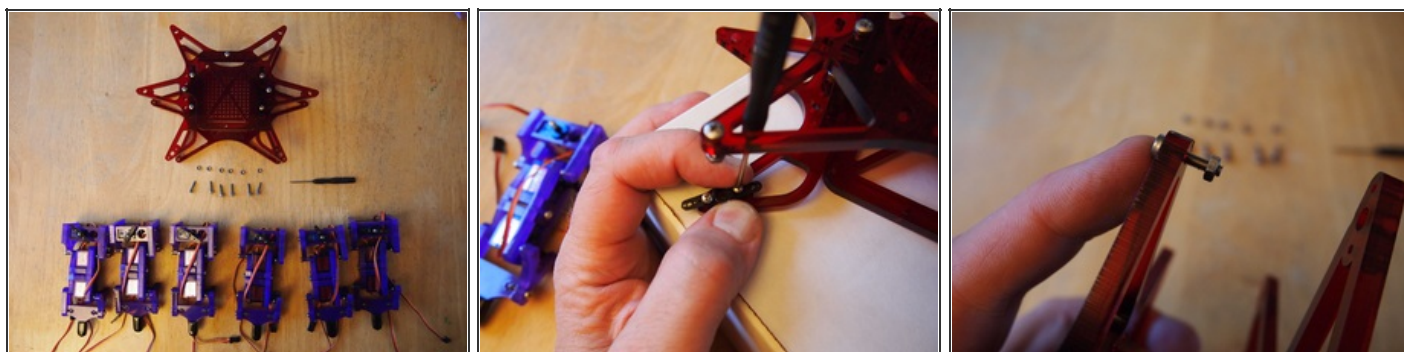
- The Top panel has a circle in the center.
- Add the top panel to the uprights.
- Place the nuts in the cavities, and thread the screws.
- Tighten the four screws with the screwdriver.

Step 5



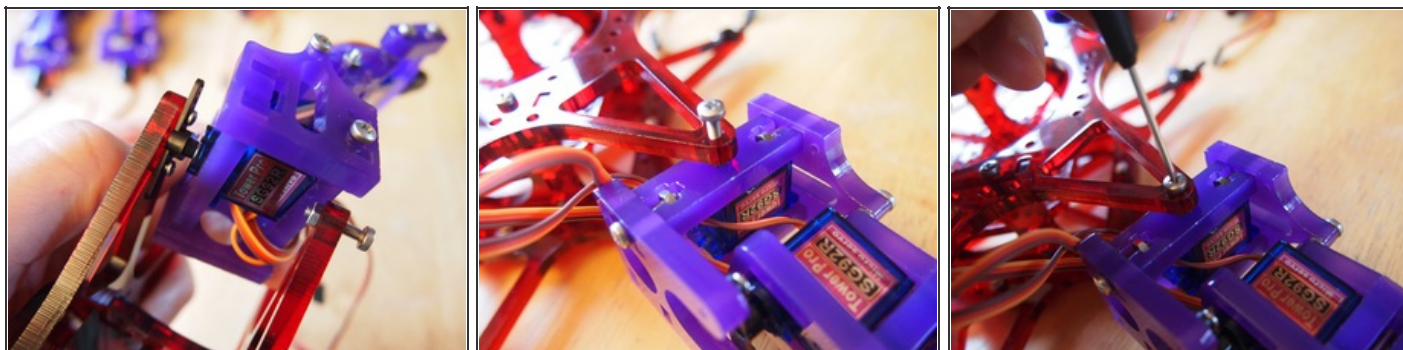
- The Battery Panel has two peaks on the sides and four triangles that form an X in the middle.
- Place the Battery Panel on the bottom of the body with the peaks pointing towards the center of the sides with the leg triangles. Install three screws and nuts to hold it in place. Tighten them with the screwdriver.
- The body is now structurally complete.

Step 6



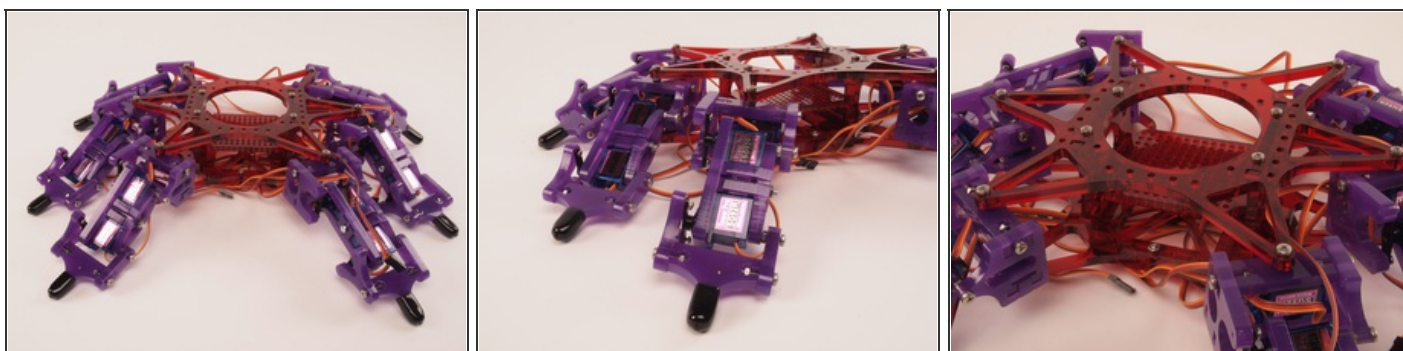
- To add a leg, you will need: Complete Leg Assembly, two #2 self-tapping screws, a servo horn with holes drilled out, a machine nut and machine screw.
- If the servo horn does not have the holes drilled out, do this now: count to the second hole from the hub and drill the hole out. Do this on both arms on the servo horn. If you don't drill the holes, the screws will be much harder to install and the horn may split when you install the screws.
- There are six triangles pointing out from the body. At the end of each triangle, there's one hole on the tops. There are three holes on the bottom triangles; the outer ones are smaller than the middle one.
- Add the servo horn to the bottom triangle with three holes. Place it so that the hub is facing up, to the center of the body. Add the two #2 self-tapping screws to the servo horn and install them so they hold the horn in place. It may be easier to start the screws while pressing against the cardboard box Hexy shipped in, or a piece of scrap wood.
- Place a machine screw in the hole on the top panel. Thread a nut onto the screw and expose a few millimeters of the screw.

Step 7



- Place the leg assembly into the space between the triangle body points.
- Fit the servo hub into the opening in the servo horn.
- Pivot the leg up so that the machine screw on the body fits into the hole in the hip.
- Tighten the screw with the screwdriver.

Step 8



- Add the remaining legs to Hexy's body until all six have been installed.
- If you put the screws into the servos, you should leave them loose enough to allow the hub to slip in the horn for now.
- The servos on the legs should be left loose until you do the motor calibration.
- When you have all six of Hexy's legs securely attached, then the body assembly is complete.
- Future Guides: Adding the circuit board and battery, Centering the servos, Adding the rangefinder, Running the test program, Installing the software, Writing your first program.

When you are complete with the build of Hexy's body and installation of the six legs, you will be

ready to: Add the circuit board and battery, Add the range finder, Center the servos, Run the preloaded sample program, Load Hexy's software, Write your first Hexy Program.

This document was last generated on 2013-01-23 12:42:12 PM.